

PATENT
Serial No. 10/575,511
Amendment in Reply to Final Office Action of June 10, 2008

**RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2841**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Atty. Docket

REMY JACOBUS WILHELMUS KAMP

NL 031223

Confirmation No. 3918

Serial No. 10/575,511

Group Art Unit: 2841

Filed: APRIL 13, 2006

Examiner: SEMENENKO, Y.

Title: PRINTED CIRCUIT BOARD

Mail Stop AF
Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT UNDER §1.116

Sir:

In response to the Final Office Action mailed on June 10, 2008, please amend the application and consider the remarks as follows:

IN THE DRAWING

Please replace FIG 1 with the enclosed replacement FIG 1.

IN THE SPECIFICATION

Please amend the specification as follows:

Replace the paragraph on page 3, between lines 1-7 of the specification with the following:

According to Figure 1 a printed circuit board comprises a carrier board or substrate having circuitry of copper tracks 1 for connecting electronic components ~~(not shown)~~ 8 on said board. The width of the copper tracks 1 is typically approximately 1 mm. The connectors of the electronic components extend through holes in the board and are fixed thereon by solder drops 2. To that end the surface of the board, including the copper tracks 1 but excluding the locations where the solder drops are applied, is provided by a solder resist protective coating.

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A printed circuit board comprising:
a substrate,
a plurality of electronic components,
a pattern of metal tracks on said substrate for connecting said electronic components, said metal tracks being covered with a protective non-conductive layer,
a fuse, said fuse comprising a narrowed metal track within the pattern, wherein said narrowed metal track is uncovered such that it is exposed to air, and wherein ~~a slot is~~ slots are provided in the substrate alongside substantially an entire length of the narrowed metal track at both sides thereof, said slots being located at a distance of less than 2 mm from the narrowed metal track.

2. (Previously Presented) The printed circuit board according to claim 1, wherein an area of at least 0.5 mm extending from said narrowed metal track is uncovered.

3. (Previously Presented) The printed circuit board according to claim 1, wherein a distance of at least 1.5 mm of the ends of the wider metal tracks extending from both ends of the narrowed metal track are uncovered.

4. (Previously Presented) The printed circuit board according to claim 1, wherein a width of said narrowed metal track is less than 0.3 mm.

Claims 5-6 (Canceled)

7. (Currently Amended) A printed circuit board comprising:
a substrate,
a plurality of electronic components,
a pattern of metal tracks on said substrate for connecting
said electronic components, said metal tracks being covered with a

protective non-conductive layer,

a fuse, said fuse comprising a narrowed metal track within the pattern, said narrowed metal track being uncovered such that it is exposed to air, wherein ~~a slot is~~ slots are provided in the substrate alongside substantially an entire length of the narrowed metal track at both sides thereof, and wherein an area between the narrowed metal track and the slots is substantially uncovered.

8. (Currently Amended) A printed circuit board comprising:

a substrate,

a plurality of electronic components,

a pattern of metal tracks on said substrate for connecting said electronic components, said metal tracks being covered with a protective non-conductive layer,

a fuse, said fuse comprising a narrowed metal track within the pattern, said narrowed metal track being uncovered such that it is exposed to air, wherein ~~a slot is~~ slots are provided in the substrate alongside substantially an entire length of the narrowed metal track at both sides thereof, and wherein a width of the slots is at least 0.5 mm.

9. (Previously Presented) An electronic ballast for a gas discharge lamp comprising a printed circuit board according to claim 1.

10. (Currently Amended) A method for producing a printed circuit board comprising the acts of:

providing on a substrate, a plurality of electronic components, and a pattern of metal tracks on said substrate for connecting said electronic components,

covering said metal tracks with a protective non-conductive layer,

forming a fuse by providing a narrowed metal track within the pattern, wherein said narrowed metal track is not covered with a protective non-conductive layer such that said narrowed metal track remains exposed to air, and

forming ~~a slot~~ slots in the substrate alongside substantially an entire length of the narrowed metal track at both sides thereof, wherein said slots are located at a distance of less than 2 mm from the narrowed metal track.

11. (Previously Presented) The method of claim 10, wherein an area of at least 0.5 mm extending from said narrowed metal track is uncovered.

12. (Previously Presented) The method of claim 10, wherein a distance of at least 1.5 mm of the ends of the wider metal tracks extending from both ends of the narrowed metal track are uncovered.

13. (Previously Presented) The method of claim 10, wherein a width of said narrowed metal track is less than 0.3 mm.

14. (Currently Amended) A method for producing a printed circuit board comprising the acts of:

providing on a substrate, a plurality of electronic components, and a pattern of metal tracks on said substrate for connecting said electronic components;

covering said metal tracks with a protective non-conductive layer;

forming a fuse by providing a narrowed metal track within the

pattern, wherein said narrowed metal track is not covered with a protective non-conductive layer such that said narrowed metal track remains exposed to air; and

forming ~~a slot-slots~~ in the substrate alongside substantially an entire length of the narrowed metal track at both sides thereof, wherein an area between the narrowed metal track and the slots is substantially uncovered.

15. (Currently Amended) A method for producing a printed circuit board comprising the acts of:

providing on a substrate, a plurality of electronic components, and a pattern of metal tracks on said substrate for connecting said electronic components;

covering said metal tracks with a protective non-conductive layer;

forming a fuse by providing a narrowed metal track within the pattern, wherein said narrowed metal track is not covered with a protective non-conductive layer such that said narrowed metal track remains exposed to air; and

forming ~~a slot-slots~~ in the substrate alongside substantially

an entire length of the narrowed metal track at both sides thereof,
wherein a width of the slots is at least 0.5 mm.

REMARKS

This Amendment is being filed in response to the Final Office Action mailed June 10, 2008, which has been reviewed and carefully considered. Entry of the present amendment and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-4 and 7-15 remain in this application, where claims 1, 7-8, 10 and 14-15 are independent.

In the Final Office Action, the Examiner objected to the drawings for allegedly not showing every feature of the invention specified in the claims, namely, a plurality of electronic components. In response, FIG 1 has been amended to include plurality of electronic components 8 in dashed line. Further, the specification has been amended in conformance with the changes to FIG 1. A replacement sheet including FIG 1 is enclosed. Applicant respectfully requests approval of the enclosed proposed drawing changes and withdrawal of the drawing objection.

In the Final Office Action, the Examiner suggested adding headings to the specification. Applicant gratefully acknowledges

the Examiner's suggestion, however respectfully decline to add the headings as they are not required in accordance with MPEP §608.01(a), and could be inappropriately used in interpreting the specification.

In the Final Office Action, claims 1-4 and 7-15 are rejected under 35 U.S.C. §112, second paragraph as allegedly indefinite. In response, claims 1, 7-8, 10 and 14-15 have been amended to remove the alleged informality noted in the Office Action. It is respectfully submitted that the rejection of 1-4 and 7-15 has been overcome and an indication as such is respectfully requested.


In the Final Office Action, page 13, first full paragraph, the Examiner corrected noted that slots at both sides, and located at a distance from, the narrowed metal track are not disclosed or suggested by the prior art. Accordingly, independent claims 1, 7-8, 10 and 14-15 are allowable since each of them substantially recites the noted features. In addition, it is respectfully submitted that claims 2-4, 9 and 11-13 should also be allowed at least based on their dependence from independent claims 1 and 10, as well as their individually patentable elements.

In addition, Applicant denies any statement, position or

avermment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 
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Attorney for Applicant(s)
July 30, 2008

Enclosure: Replacement drawing sheet (1 sheet including FIG 1)

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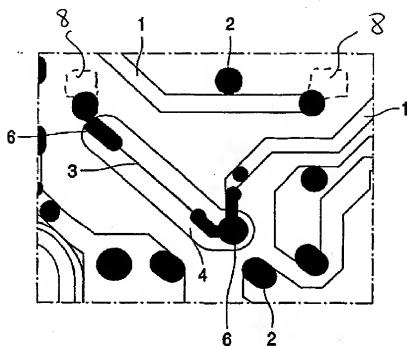


FIG. 1

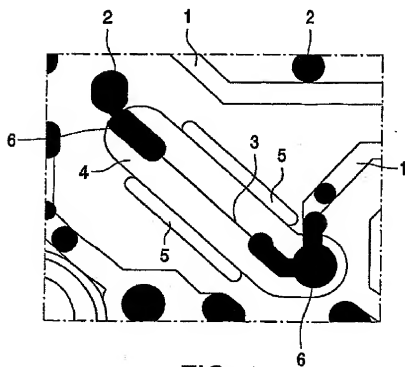


FIG. 2